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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,778	06/22/2001	Carl M. Panasik	TI-32891	8711

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EXAMINER

PEREZ, ANGELICA

ART UNIT PAPER NUMBER

2618

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/887,778	Applicant(s) PANASIK ET AL.	
	Examiner Perez M. Angelica	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 31 recites the limitation "the wireless communication transceiver" in line 2, page 9. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1-8, 10-14, 16-20 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainish (Rainish et al., US Patent No.: 6,606,490 B1) in view of Harrison (Harrison, Collin G.; US Patent No.: 5,181,200 A).

Regarding claims 1, 10, 16, 22 and 28, Rainish teaches of a method of power management of data communication, where the method between a base station and a mobile station over a wireless communication network (column 1, lines 14-18), the method comprising the steps of: transmitting a data signal between a mobile station and a base station (column 1, lines 21-24); monitoring the data signal received by the mobile station from the base station (column 1, lines 24-28); and disabling transmission of the data signal by the mobile station (column 1, lines 24-28; where "disabling transmission"

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corresponds to going to a “sleep phase”); detecting an abrupt change in signal delay received by the mobile station from the base station to provide an indication of whether the mobile station is in a shadow of the base station (an abrupt change in signal delay is an inherent indicator of shadowing; columns 1 and 2, lines 28-35 and 21-29, 42-52, respectively; where the sudden prolong delay detection indicates a signal is corrupted by shadowing among other factors); transmitting a signal from the base station to the mobile station that indicates a loss of at least one primary base station rake finger to provide a determination whether the mobile station is in a shadow of the base station (column 1 and 2, lines 28-35 and 21-29, 42-52, respectively, lines 33-36; where it is well known in the art that the loss of a at least one primary base station rake finger is an indication of loss of signal or shadowing).

Rainish does not specifically teach of a transceiver and of disabling transmission of signals by the mobile station, while maintaining the ability of the mobile station to receive data signals when the mobile station is in a shadow of the base station.

In related art regarding the method of handoff for mobile wireless workstations, Harrison teaches of a transceiver (figure 1b, item 22), disabling transmission of signals by the mobile station, while maintaining the ability of the mobile station to receive data signals (columns 7 and 8, lines 17-18, 45-49 and 44-46, 55-60; respectively) when the mobile station is in a shadow of the base station (column 7, lines 5-10).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Rainish’s disabling transmission with Harrison’s

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selective transmission/receiving while shadowing occurs in order to save resources, as taught by Harrison.

Regarding claim 22, Rainish teaches of a method of data communication between a base station and a mobile station over a wireless communication network (column 1, lines 14-18), the method comprising the steps of: transmitting data signals between a mobile station and a base station (column 1, lines 21-24); monitoring the data signals received by the mobile station from the base station (column 1, lines 24-28); detecting an abrupt change in signal delay received by the mobile station from the base station to provide an indication of whether or not the mobile station is in a shadow of the base station (columns 1, 2 and 3, lines 28-35; 21-29, 42-52 and 14-51, respectively; where the finger positions do not change greatly in time. If a big change is detected, this is an indication of poor quality of the signal, shadowing. In addition, sudden prolong delay detection indicates a signal is corrupted by shadowing among other factors).

Rainish does not specifically teach of disabling the ability of the mobile station to transmit data signals to, while maintaining the ability of the mobile station to receive data signals from, the base station when the mobile station is in a shadow of the base station.

In related art regarding the method of handoff for mobile wireless workstations, Harrison teaches of disabling the ability of the mobile station to transmit data signals to, while maintaining the ability of the mobile station to receive data signals from, the base

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station (columns 7 and 8, lines 17-18, 45-49 and 44-46, 55-60; respectively) where the mobile station is in a shadow of the base station (column 7, lines 5-10).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Rainish's disabling transmission with Harrison's selective transmission/receiving while shadowing occurs in order to save resources, as taught by Harrison.

Regarding claim 2, Rainish in view of Harrison teaches all the limitations according to claim 1. In addition, Rainish teaches where the step of monitoring the data signal received by the mobile station from the base station comprises monitoring the signal to noise ratio (SNR) of the data signal received by the mobile station from the base station to provide a determination whether the mobile station is in a shadow of the base station (columns 6 and 7, lines 65-67 and 1-2, respectively).

Regarding claim 3, Rainish in view of Harrison teaches all the limitations according to claim 1. Rainish also teaches where the step of monitoring the data signal received by the mobile station from the base station comprises receiving a control signal from the base station that indicates a loss of station rake fingers to provide a determination whether the mobile station is in a shadow of the base station (column 5, lines 23-25; where the rake receiver corresponds to the BS).

Regarding claim 4, Rainish in view of Harrison teaches all the limitations according to claim 1. Rainish further teaches the steps of monitoring the delay of the data signal received by the mobile station from the base station; and identifying an abrupt change in the delay received by the mobile station from the base station to

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provide an indication of whether the mobile station is in a shadow of the base station (column 1, lines 28-35; where the delay is one of the parameters considered as an indicator).

Regarding claims 5, 11, 17 and 23, Rainish in view of Harrison teaches all the limitations according to claim 1. Rainish also teaches where the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station to ramp down its power output until the mobile station transmitter enters an idle (off) state (column 4, lines 32-37 and 1-2; where a "sleep" mode corresponds to the "idle state").

Regarding claims 6, 12, 18 and 24, Rainish in view of Harrison teaches all the limitations according to claim 1. Rainish further teaches where the step of disabling transmission of the data signal by the mobile station when the mobile station is in a shadow of the base station comprises causing a transmitter associated with the mobile station to ramp down its power output to achieve a power condition associated with a previous period of time (column 4, lines 34-41; where the "waking up" corresponds to the previous power condition).

Regarding claims 7, 13, 19 and 25, Rainish in view of Harrison teaches all the limitations according to claim 1. Rainish further teaches the step of enabling transmission of the data signal by the mobile station when the mobile station is no longer in a shadow of the base station and subsequent to disabling transmission of the data signal at a previous power level by the mobile station (column 4, lines 32-41).

Regarding claims 8, 14, 20 and 26, Rainish in view of Harrison teaches all the limitations according to claim 1. Also, Rainish teaches where the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches a previous power level (column 4, lines 34-41; where the increase in power occurs during the "waking up" period).

5. Claims 9, 15, 21 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainish in view of Harrison as applied to claims 7, 13, 19 and 25 above, and further in view of Bergins (Bergins et al., Patent No. 6,564,071 B1).

Regarding claims 9, 15, 21 and 27, Rainish in view of Harrison teaches all the limitations according to claim 1.

Rainish in view of Harrison does not specifically teach where the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches the maximum power level.

In related art regarding transmission of data over a cellular telephone channel, Bergins teaches where the step of enabling transmission of the data signal by the mobile station subsequent to disabling transmission of the data signal by the mobile station comprises causing a transmitter associated with the mobile station to ramp up its power output until the mobile station transmitter output power level reaches the

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maximum power level (column 3, lines 13-21 and figure 2, items 203, 204 and 205; where the threshold determines a minimum and minimum level).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Rainish in view of Harrison enabling transmission with Bergins' power level determinant in order to restart connection after a maximum power level is reached.

Regarding claim 29, Rainish in view of Harrison teaches all the limitations according to claim 28. Rainish further teaches where the received quality signal is defined by SNR (columns 3 and 4, lines 52-53 and 1-37).

Regarding claim 30, Rainish in view of Harrison teaches all the limitations according to claim 28. Rainish further teaches where the received signal quality is defined as a received signal level (columns 3 and 4, lines 52-53 and 1-37; where the power estimate provides the level of the signal quality).

6. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rainish in view of Harrison, and further in view of Bartle (Bartle et al.; US Patent No.: 6,018,655 A).

Regarding claim 31, Rainish in view of Harrison teaches all the limitations according to claim 1.

Rainish does not specifically teach where the wireless communication transceiver is a cellular handset transceiver.

In related art regarding an imminent change warning in a cellular system, Bartle teaches of a cellular handset transceiver (figure 1, item 22).

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It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Rainish in view of Harrison enabling transmission method with Bartle's transceiver in order to transmit/receive information about the system conditions to a handheld cellular apparatus, as taught by Bartle.

Response to Arguments

7. Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Angelica Perez whose telephone number is 703-305-8724. The examiner can normally be reached on 7:15 a.m. - 3:55 p.m., Monday - Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.

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Angelica Perez
(Examiner)


NAY MAUNG
SUPERVISORY PATENT EXAMINER

Art Unit 2684

April 10, 2006